Research and Development in Industry: 1998

Funds, 1998 Scientists and Engineers, January 1999

Detailed Statistical Tables

Division of Science Resources Studies
Directorate for Social, Behavioral, and Economic Sciences



Research and Development in Industry: 1998

Funds, 1998 Scientists and Engineers, January 1999

Detailed Statistical Tables

Raymond M. Wolfe, Project Officer and Principal Author

Division of Science Resources Studies
Directorate for Social, Behavioral, and Economic Sciences

Research and Development in Industry: 1998

NSF 01-305

NATIONAL SCIENCE FOUNDATION ARLINGTON, VA 22230

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

RETURN THIS COVER SHEET TO ROOM P35 IF YOU DO NOT WISH TO RECEIVE THIS MATERIAL , OR IF CHANGE OF ADDRESS IS NEEDED , INDICATE CHANGE INCLUDING ZIP CODE ON THE LABEL (DO NOT REMOVE LABEL).

SPECIAL FOURTH-CLASS RATE POSTAGE & FEES PAID National Science Foundation Permit No. G-69

National Science Foundation

Rita R. Colwell *Director*

Directorate for Social, Behavioral, and Economic Sciences

Norman M. Bradburn

Director

Division of Science Resources Studies

Lynda T. Carlson Mary J. Frase

Division Director Deputy Director

Ronald S. Fecso

Chief Statistician

Research and Development Statistics Program

John E. Jankowski *Program Director*

DIVISION OF SCIENCE RESOURCES STUDIES

The Division of Science Resources Studies (SRS) fulfills the legislative mandate of the National Science Foundation Act to ...

provide a central clearinghouse for the collection, interpretation, and analysis of data on scientific and engineering resources and to provide a source of information for policy formulation by other agencies of the Federal Government...

To carry out this mandate, SRS designs, supports, and directs periodic surveys as well as a variety of other data collections and research projects. These surveys yield the materials for SRS staff to compile, analyze, and disseminate quantitative information about domestic and international resources devoted to science, engineering, and technology.

If you have any comments or suggestions about this or any other SRS product or report, we would like to hear from you. Please direct your comments to:

National Science Foundation Division of Science Resources Studies 4201 Wilson Blvd., Suite 965 Arlington, VA 22230

Telephone: (703) 292-8774 Fax: (703) 292-9092 email: srsweb@nsf.gov

Suggested Citation

National Science Foundation, Division of Science Resources Studies, *Research and Development in Industry:* 1998, NSF 01-305, Project Officer and Principal Author, Raymond M. Wolfe (Arlington, VA 2000).

October 2000

SRS data are available through the World Wide Web (http://www.nsf.gov/sbe/srs/stats.htm). For more information about obtaining reports, contact pubs@nsf.gov or call (301) 947-2722. For NSF's Telephonic Device for the Deaf, dial (703) 292-5090.

ACKNOWLEDGMENTS

The preparation of *Research and Development in Industry:* 1998 was managed by Raymond M. Wolfe, Economist, National Science Foundation, Division of Science Resources Studies (SRS), Research and Development Statistics Program; under the direction of John E. Jankowski, Program Director; Ronald S. Fecso, Chief Statistician; Mary J. Frase, Deputy Division Director; and Lynda T. Carlson, Division Director. The U.S. Bureau of the Census designed the statistical sample and collected, processed, and tabulated the statistics in this report under Interagency Agreement SRS 99-06533. Census staff who worked on this project were William G.

Bostic, Jr., Elinor J. Champion, Stacey J. Cole, Paul L. Hsen, Jolanta C. Krywonis, Gary L. Kusch, Yvette E. Moore, Charlotte M. Oliver, Annette J. Ralston, Ronald D. Scarlett, Ronald W. Taylor, and Daniel R. Tulp. Raymond M. Wolfe wrote the text, Census staff contributed descriptions of the sample and survey methodology, and Nita Congress edited the manuscript. Julia H. Harriston and Tanya R. Gore, under the direction of Anne M. Houghton, Publications Manager, Information Services Group, prepared the report for publication and handled arrangements for printing and distribution.

CONTENTS

	Page
Introduction	1
Note to Users of Historical Statistics	3
SECTION A. DETAILED STATISTICAL TABLES	5
SECTION B. TECHNICAL NOTES AND TECHNICAL TABLES	
SECTION C. SURVEY DOCUMENTS	181